



we  
simplify  
bakers'  
lives.



# About us

Kornfeil is a respected manufacturer of bakery ovens and process equipment, recognized across Europe for our commitment to quality and innovation. With over 30 years of experience in the development and installation of bakery ovens, our products have earned the trust of hundreds of satisfied clients worldwide.

Our goal is to expand our presence and bring the same high level of reliability and efficiency that has earned us trust in bakeries around the world to new markets. With installations in over 45 countries and a growing presence in key markets, we pride ourselves on delivering tailored solutions that meet the unique needs of each bakery. We combine traditional craftsmanship with the latest technological advancements to ensure consistent quality and energy efficiency of our products.

Our vision is to provide bakers with innovative and energy-efficient solutions that simplify daily operations while maintaining the artisanal quality of their products. We focus on delivering advanced program controls and technology that streamline the production process, reduce energy consumption, and enhance efficiency. Led by the deep experience of Karel Kornfeil and the forward-thinking Kornfeil family, we are committed to building long-term partnerships based on trust, reliability, and mutual success.



**„The right choice of  
oven will make a  
baker’s job easier for  
decades.“**

Karel Kornfeil, founder of the company



# Our story

**1991**

Founded in 1991 by Karel Kornfeil, a visionary and experienced leader in the baking industry, our company began with the creation of our first oven. Handcrafted by Karel himself, this oven is still in use today, representing the lasting quality and craftsmanship that guide our work.

**1996**

Since the 1990s, we have prioritized eco-friendly innovations with the development of EkoBlok—a system that harnesses heat energy from exhaust gases to heat water. This technology reduces energy costs while contributing to environmental sustainability, making our solutions both efficient and environmentally responsible.

**2023**

In 2023, Kornfeil transitioned to the next generation of leadership, with Karel Kornfeil stepping back from daily management but remaining actively involved as an advisor. His experience continues to guide the company, ensuring its core values of quality, innovation, and sustainability are upheld under the forward-thinking leadership of the new generation.

**1992**

Our first loading device was developed to assist bakers with one of the most labour-intensive tasks—handling the baker's peel. While it may have seemed like a simple helper at the time, today, our advanced loading devices fully automate this process, eliminating the need for manual labour and significantly increasing production efficiency.

**2014**

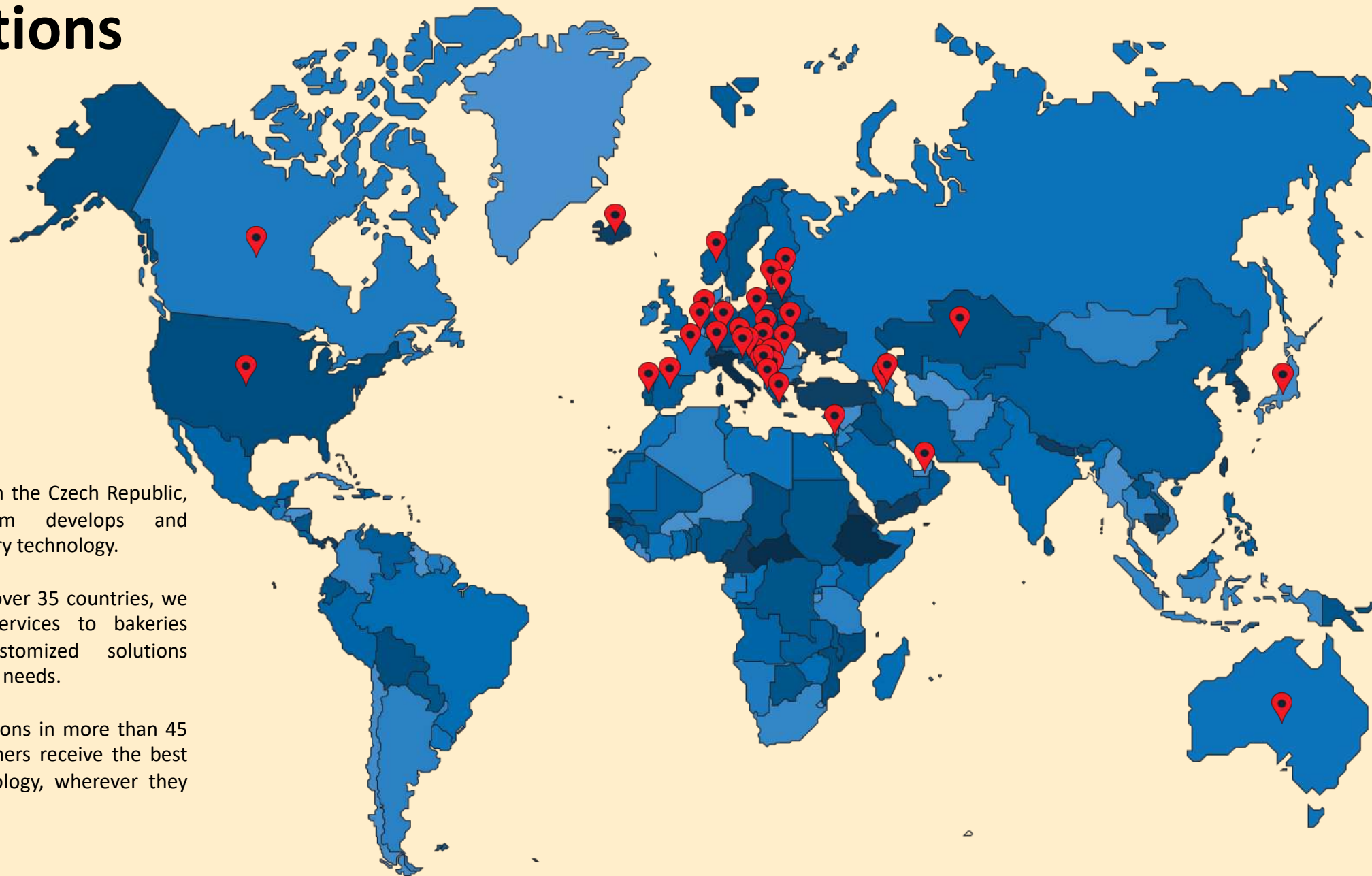
At Kornfeil, understanding every technical detail of the products we manufacture is essential to us. Since 2014, we have expanded our product line to include continuous proofers, ensuring precise and reliable dough proofing. That same year, Martina Kornfeilová was appointed as an Executive Officer, marking a new phase in the company's leadership.

**2024**

The Family Legacy Continues. Sisters Martina and Karolína Kornfeilová became co-owners of the company, representing the next generation of leadership and continuing the Kornfeil family legacy.



# Locations



Our headquarter is located in the Czech Republic, where our expert team develops and manufactures advanced bakery technology.

With distribution centres in over 35 countries, we offer our products and services to bakeries worldwide, delivering customized solutions tailored to meet their specific needs.

We have completed installations in more than 45 countries, ensuring our partners receive the best possible support and technology, wherever they are located.

**Product line**



# Our product line\*

## Deck ovens

- Variant (cyclothermic)
- Fornata (electric)
- ThermoStar (thermal-oil)
- ThermoStar Classic (thermal-oil)

## Control systems for deck ovens

- Basic
- Comfort
- MultiControl

## Loading devices for deck ovens

- Asistent Manual
- Asistent Super
- Asistent Com
- Asistent Line

## Accessories

- Feed tables
- Belt conveyor
- Take-off conveyors
- Rotary table
- Bread counter
- Spiral slide
- Dampening conveyors

## Rack ovens

- ThermoMax (thermal-oil)
- ThermoMax Classic (thermal-oil)
- RotoMax

## Tunnel ovens

- ThermoLine (thermal-oil)
- ThermoLine compact (thermal-oil)

## Proofing and dampening

- Box proofers
- Continuous proofers
- Dampening box
- Dampening conveyors
- Dampening bar
- Dampening table

## Technology

- EkoBlok ByPass
- Deodorant
- BioTherm



*\*All our products can be found in our catalogue or website.*

**Featured products**



# Variant – cyclothermic gas oven

Proven model series of cyclothermic baking ovens that have become a bestseller in Czech and Slovak bakeries. Variant can easily handle a wide range of doughs from loose wheat breads to dense rye breads. The ovens have good temperature flexibility with easy setting of baking and final temperatures.

The adjustable flap system and the programmed baking ensure that each deck bakes evenly separately. Each deck in the oven is equipped with its own unit for the production of process steam, which it is able to generate every 10 minutes. The oven has a thick layer of insulation (350–400 mm), which prevents unnecessary loss of heat energy. The Weishaupt burners are at the cutting edge of the industry, both technically and ecologically. The heating medium can be either natural gas or fuel oil.

## Benefits

- proven model range
- good temperature stability and uniformity
- baking a wide range of breads
- powerful steaming
- universal use in all categories of bakeries

## Technical parameters

Baking surface	up to 35m2
Deck height	200 or 230 mm
Deck width	1 200 or 1 800 mm
Deck depth	1600, 2 000 or 2 400 mm
Number of decks	4 to 8



# RotoMax – rotary rack oven

RotoMax is a rotary rack oven designed for bakeries requiring consistent results, high throughput, and 24/7 reliability. Built for industrial performance with artisanal quality, RotoMax combines programmable baking precision, optimal airflow regulation, and robust construction for a wide variety of products – all while maintaining maximum energy efficiency.

The highly efficient steam generator ensures sufficient steam and product tenderness even when baking one rack after another. The robust body with a stainless steel and fully welded inner chamber guarantees a service life of up to 20 years. The oven is delivered complete with service access from the front. All RotoMax rotary ovens feature a clear touch control panel that allows easy setting of recipes and temperature curves. The heating medium can be either natural gas or electricity.

## Benefits

- universal rotary oven for a wide range of products
- maximum temperature stability
- programmed airflow control for variable baking
- powerful heat exchangers for baking trolley after trolley
- robust oven body with fully welded chamber
- long service life of up to 20 years



# Thermal-oil solutions

## Advantages of Kornfeil thermal-oil solutions

### Higher quality of products

Thanks to the gentle radiant heat, the pastry remains supple for longer period of time.

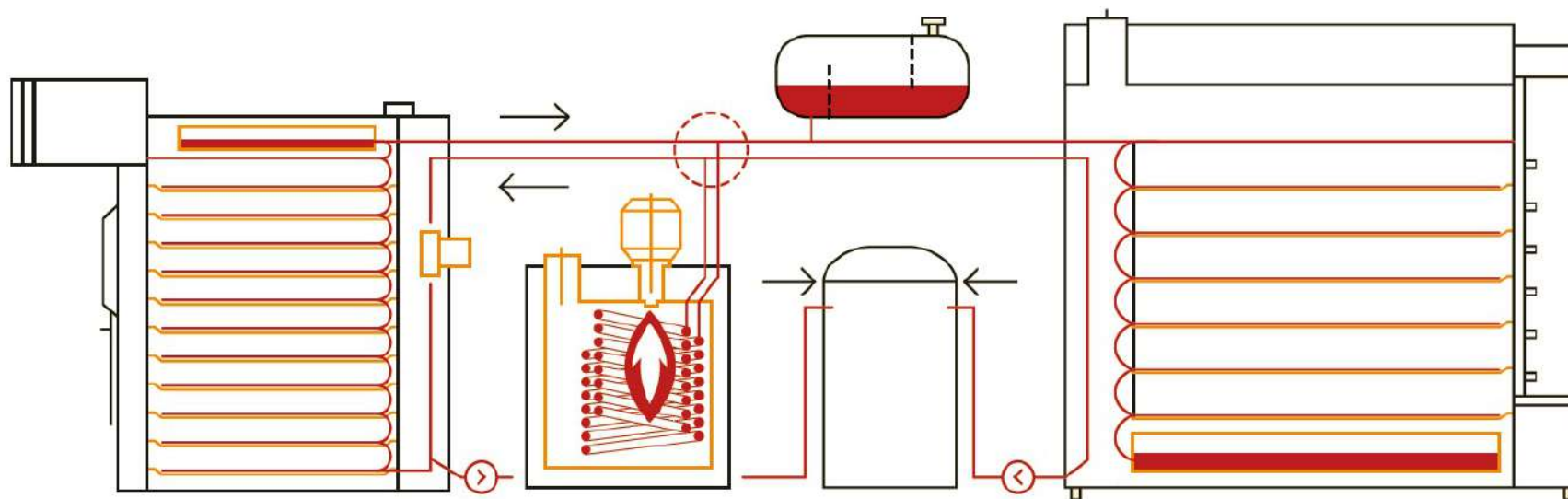
### Saving energy costs

Compared to gas ovens, thermal-oil ovens have significantly lower energy consumption (up to 15%).

### Lower environmental burden

Thanks to lower energy consumption, the operation of the technology is more environmentally friendly. Alternative energy sources can also be used to heat the thermal-oil.

Thermal-oil serves as a heat transfer medium between the thermal-oil boiler and the baking oven. Its properties ensure efficient transfer of heat energy and at the same time it serves as a good heat accumulator. Thermal-oil at 290 °C flows in the upper and lower radiators of the baking oven. Due to the minimal difference between the temperature of the oil itself and the temperature in the radiators (approx. 10–20 °C), we obtain a gentle radiant heat for baking for the best product quality.





ThermoStar thermal-oil ovens with baking areas from 15 to 72 m<sup>2</sup> are preferred for ideal baking uniformity, good temperature stability and a properly baked crust every time.

The energy transfer is more efficient compared to cyclothermic ovens and results in lower energy consumption. For a better use of the bakery space, the thermal-oil ovens can be assembled with a larger number of decks, 4–15, for different types of bread and pastries and with the loading assistants for their operation.

#### Benefits

- fast temperature rise and good temperature stability
- ideal baking uniformity with a deck difference of  $\pm 1$  °C
- economical baking with gentle radiant heat
- wide choice of ovens in single, double, triple or quadruple circuit design

#### Technical parameters

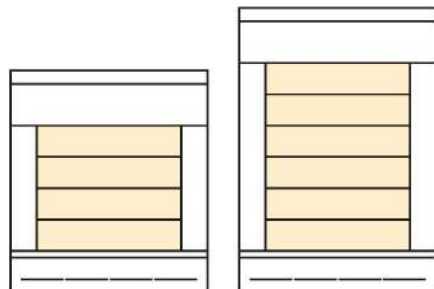
Baking surface	15 to 72 m <sup>2</sup>
Deck height	200 or 230 mm
Deck width	1 800 mm or 2 000 mm
Deck depth	2 000 or 2 400 mm
Number of decks	4 to 15



# ThermoStar circuit examples

## Single circuit

- same temperature in each decks
- one product baking



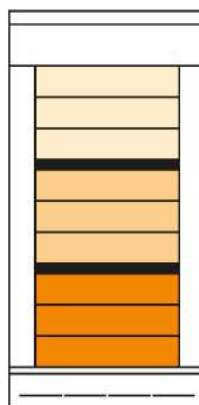
## Double circuit

- two groups of decks with independent temperature curve
- two independent ovens
- two products baking



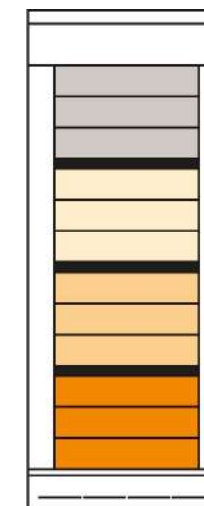
## Triple circuit

- three groups of decks with independent temperature curve
- three independent ovens
- three products baking



## Quadruple circuit

- four groups of decks with independent temperature curve
- four independent ovens
- four products baking



# ThermoStar Classic

ThermoStar Classic thermal-oil deck ovens have quickly gained popularity among small and larger bakeries with a focus on high quality products.

The compact ThermoStar Classic solution has the heating unit integrated directly into the oven, including the burner for the respective fuel, meaning that it does not need a thermal-oil boiler room. The solution allows for a short installation time, and at the same time an expressly fast start of the actual baking.

## Benefits

- excellent temperature flexibility and stability
- uniformity of baking
- unique microcirculation of air in the deck
- perfectly baked crust
- economical baking with low energy consumption
- single-circuit design

## Technical parameters

Baking surface	up to 26m <sup>2</sup>
Deck height	230 mm
Deck width	1 800 mm
Deck depth	2 000 or 2 400 mm
Number of decks	4 to 6





Rack box ovens are nowadays one of the basic equipment of modern bakeries of all categories. They are mainly designed for baking of regular and sweet pastries, confectionery and durable bakery products.

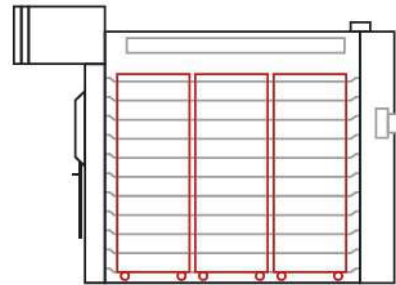
ThermoMax rack ovens are one of the stalwarts of our bakers. Operation is easy and intuitive with a control panel with a 10" colour touch screen.

As with deck ovens, a wide range of functions can be set in the user interface to make baking simple and minimize human error.

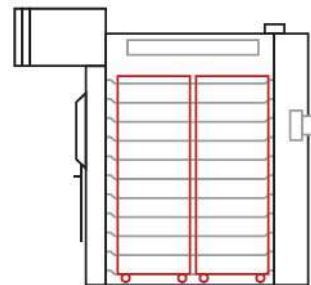
### Benefits

- baking with gentle radiant heat
- ideal baking uniformity
- maximum temperature stability
- ideal temperature distribution and its curves for each assortment of bread products
- high baking performance on a small ground plan
- baking rack after rack

3 rack design  
size 18 - 21m<sup>2</sup>



2 rack design  
size 9 - 14m<sup>2</sup>





# ThermoMax Compact

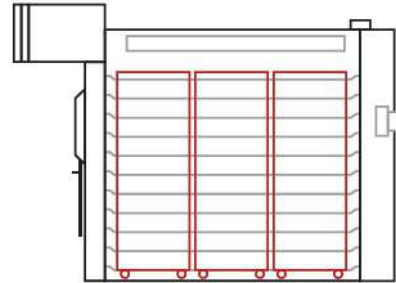
The ThermoStar Compact model range of thermal-oil rack ovens with an integrated boiler is designed for bakers with limited space in the bakery.

The ThermoMax Compact thermal-oil rack ovens work on the principle of radiant heat, which prevents the baked goods from drying out and thus increases the quality of white and ordinary baked goods such as rolls, buns and baguettes. For form and specialty breads, ThermoMax Compact offers maximum temperature stability to ensure the desired performance and a well-baked crust.

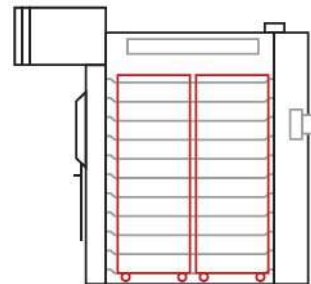
## Benefits

- lower energy consumption compared to a central boiler system
- radiant heat baking - trolley handling
- Ideal temperature distribution and precise temperature curves for each range of baked goods
- micro-circulation of air for crust and colouring
- high baking performance in a small footprint

3 rack design  
size 18 - 21m<sup>2</sup>



2 rack design  
size 9 - 14m<sup>2</sup>





To produce large batches of one type of bread, buns or rolls, the thermal-oil tunnel oven offers a unique combination of high performance with baking quality and low energy consumption. In classic or compact design. Each belt oven is made to measure.

The ThermoLine thermal-oil oven is an energy-efficient solution for baking large batches of the highest quality bakery products such as buns or rolls.

Thanks to the ThermoLine's gentle radiant heat, baked goods stay moist longer and are still indistinguishable to customers from products from the old and cost-intensive cyclothermic tunnel ovens.

The operation of ThermoLine thermo-oil tunnel ovens is very simple and fully automated thanks to the MultiControl control system, which provides a perfect overview of what is happening in the bakery 24 hours a day and online.

## Benefits

- radiant heat baking for continuous production of bakery products
- ideal temperature distribution
- low input energy consumption
- precise control of steam pressure and intensity of top and bottom baking



# ThermoLine Compact

The ThermoLine Compact thermal-oil tunnel oven is as compact as possible due to the installation of the thermal-oil source directly on the oven. The thermal-oil boiler, which provides heating of the oven and the entire system, is located on the belt oven. This is a very efficient and economically advantageous solution.

The concept of the whole oven is designed as a modular design composed of individual blocks.

The ovens are delivered to the bakery in the form of finished insulated blocks. In the bakery, only the connection of the blocks with thermal-oil piping, wiring and installation of the baking belt is carried out. Installation takes about 7–10 days. The length of installation depends on the readiness of the building and the media.

## Benefits

- excellent temperature flexibility and stability
- radiant heat baking for continuous production of bakery products
- ideal temperature distribution and precise temperature control
- easy to change the range of bakery products
- temperature curves for each range of baked goods
- low input energy consumption thanks to the thermo-oil energy transfer system







# Loading devices for deck ovens

A deck oven would not exist without a loading machine. A wide range of loading devices meets the needs of small and industrial bakeries. We develop and manufacture the loading devices ourselves; they speak the same language as deck ovens.

Asistent loading devices are an intelligent tool and a great help for bakers. They provide both dough loading and the unloading of bread and pastry from the individual decks using the MultiControl control system. Their movements and all functions are controlled by a computer system.

Unlike a baker, the Asistent not only operates several deck ovens at the same time, but it also makes the actual loading of dough and removal of bread from the baking ovens easier and faster. Depending on the size of the bakery and the required output, there are five types of Asistent loading device available.





# Types of loading devices for deck ovens

## Asistent Manual

The Asistent Manual loading device is an intelligent tool whose all functions and movements are based on a mechanical base with a counterweight. It is a great helper for bakers, it can load and remove bread from the oven decks. It is suitable for 1–2 ovens in the half-deck version.

- simple and quick oven installation
- easy to operate
- half-deck design

## Asistent Line

AssistLine automatic loading devices are the fastest loading option for fully automated MultiControl deck oven lines. They can accommodate up to 6 ovens with a maximum of 40 decks and are rated for 24-hour operation.

- highest level of baking automation
- high baking performance in a small baking area
- possibility to fit up to 15 deck ovens
- designed for industrial operation
- loading and removal of bakery products from 50 to 2 500 g
- control: MultiControl

## Asistent Super

The Asistent Super loading device with a deck width of 1 200/1 800 mm is one of the most requested accessories for deck ovens. It is a version with motorized travel and simple operation. This comfortable version is especially suitable for medium-sized bakeries.

- travel paths for operating multiple ovens
- automatic START of baking program
- control: Basic, Comfort

## Asistent Com

The Asistent Com loading device ensures fully automatic loading and removal from deck without the need for human intervention. It is suitable for the operation of semi-automatic and automatic bread lines. It represents a more powerful device for medium-sized bakeries with a requirement for 100 % reliable operation.

- higher model series
- ideal for high baking performance
- baking of small-size pastries from 50 g directly on the baking plates
- motorized travel × static positioning in single oven installations
- automatic belt tensioning
- control: Comfort, MultiControl

# Feed tables

Feed tables are multifunctional devices designed for quick transfer of dough to the Asistent loading devices. They also allow marking and automatic spreading. They are an intelligent and variable intermediate element for maximum performance of Asistent loading devices.

## **Feed table AS-01**

It is designed for manual tipping of dough from baskets. The dough is placed from the baskets onto the feed table belt, from which it is quickly transferred to the loading device

## **Feed table AS-02**

In combination with the AS-LIFT transfer table, it forms a unit for very fast transfer of small-size bakery products rising in trolleys on plates. The operator places the dough plates with the risen dough on the AS-LIFT, which is then moved to the loading device by means of an under-picking process.

## **Feed table AS-03**

It is primarily designed to transfer the dough from the continuous proofer to the Asistent loading device, which quickly places it into the deck oven. Thanks to the intermediate setting option, it can also be used for manual loading. The line thus combines automated operation with the possibility of manual production. The table is equipped with a pneumatic lifting of the operating surface and a cross travel to meet all the layout requirements of the bakery.





# Continuous proofers

To ensure that the dough rises properly at the optimum temperature and humidity, climate-controlled proofers are used. They ensure optimum conditions for the rising process, which gives bread and pastries the perfect shape and appearance.

Dampening the dough just before it is placed in the ovens or continuous tunnel ovens affects the quality and gloss of the bakery products themselves.

Continuous proofers are a great tool for full automation of the baking process, always tailor-made whether you are proofing bread or ciabatta.

## Benefits

- the highest level of industrial automation in bakeries
- everything controlled by the MultiControl control system from proofing to handling of finished products – also suitable for loose doughs with high water content and high porosity
- low energy costs for operation







# Types of Continuous proofers

## Universal proofers for bread and pastry

### *Proofing on baking trays*

- Ideal for making sweet pastries, baguettes and specialty products
- automatic loading onto and removal from baking trays
- selectable proofing time from 40 to 120 minutes
- designed for trolley and belt ovens

### *Board proofers*

- developed for free-rising wheat products such as ciabatta, pizza, etc.
- fully automatic operation with high product variability
- free rising on plates with automatic loading and removal of risen products
- fixed or variable rising time (40–120 minutes)

### *Proofers to produce common bakery products*

- production of rolls, buns and bread rolls

## Proofers for bread making

### *Basket*

- suitable for rye and rye-wheat breads
- rattan baskets of various sizes and shapes
- gentle tipping from a minimum height while maintaining the correct shape
- working width 1 800–3 000 mm

### *Continuous with troughs with textile insert*

- designed for mechanized production of wheat products and batards
- output from 800 to 5 000 pieces of product per hour
- working width 1 800–3 000 mm

# EkoBlok Bypass

**EkoBlok provides complete treatment and recovery of waste energy, flue gas and steam from gas and oil bakery ovens as well as from steam and thermal-oil boilers.**

The waste energy is recovered in the form of hot water at a temperature of approx. 80 °C. EkoBlok reduces pollutants from the flue gases of the individual ovens, including CO<sub>2</sub> emissions, by means of so-called showering.

## **How does EkoBlok work?**

By showering the flue gases, it mainly eliminates sulphur and sulphur-like substances, including soot, and thus protects the air from acid rain. The outlet air temperature of the EkoBlok is reduced to a level of 50 to 60 °C. The use of EkoBlok means that the input energy is 93–94 % used in modern deck and trolley ovens and 84–86 % in belt ovens. The energy from the flue gases and the condensation heat of the steam is converted into 80 °C hot water and stored in separate storage tanks for further use.

### **EkoBlok ExtraSteam**

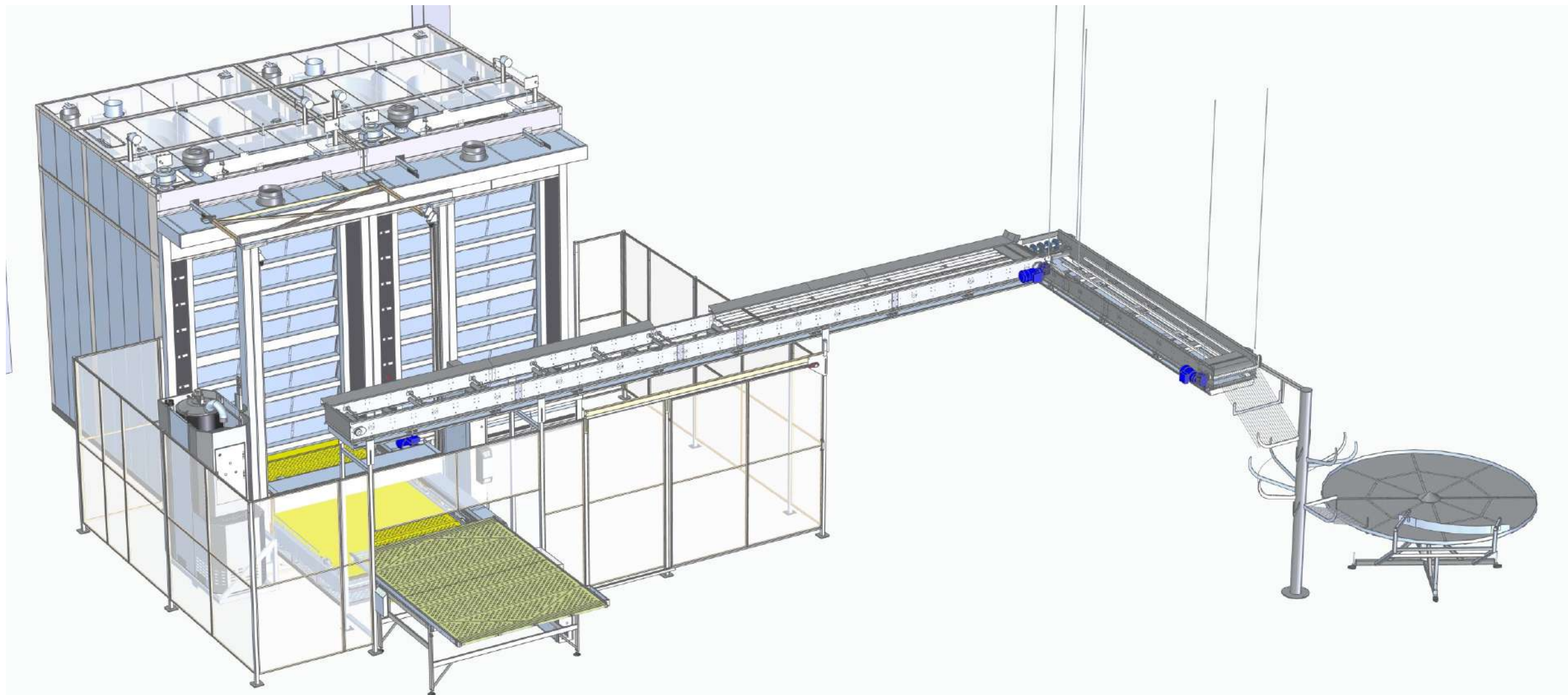
- separated flue gas and steam.
- no steam cleaning effect.
- 2 energy outputs.
- 80/60 °C service water.
- hot clean water 60–90 °C.

### **EkoBlok Steam**

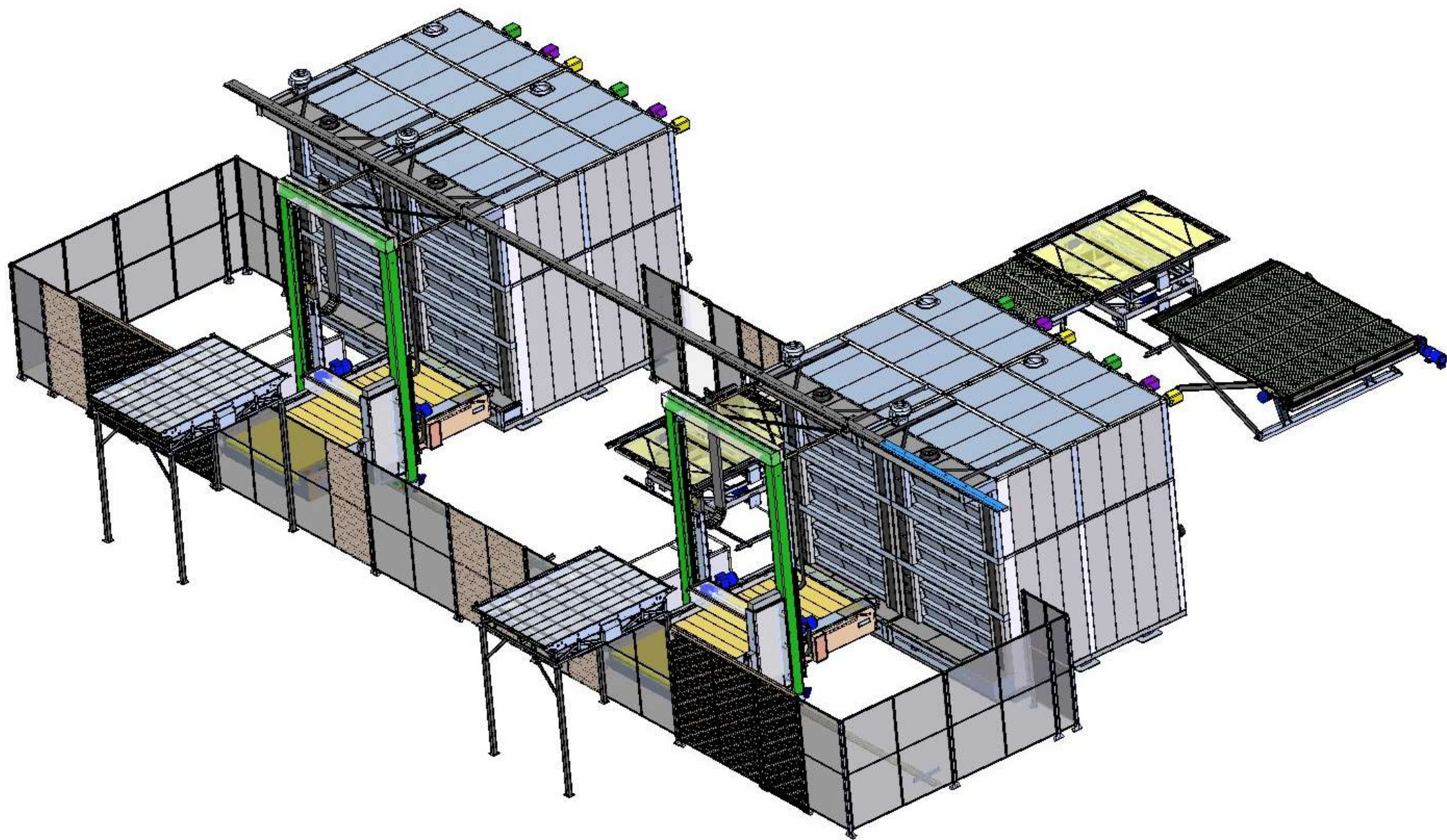
- designed to process exhaust steam.
- no steam cleaning effect.
- hot clean water 60–90 °C.
- 1 chimney from the bakery.



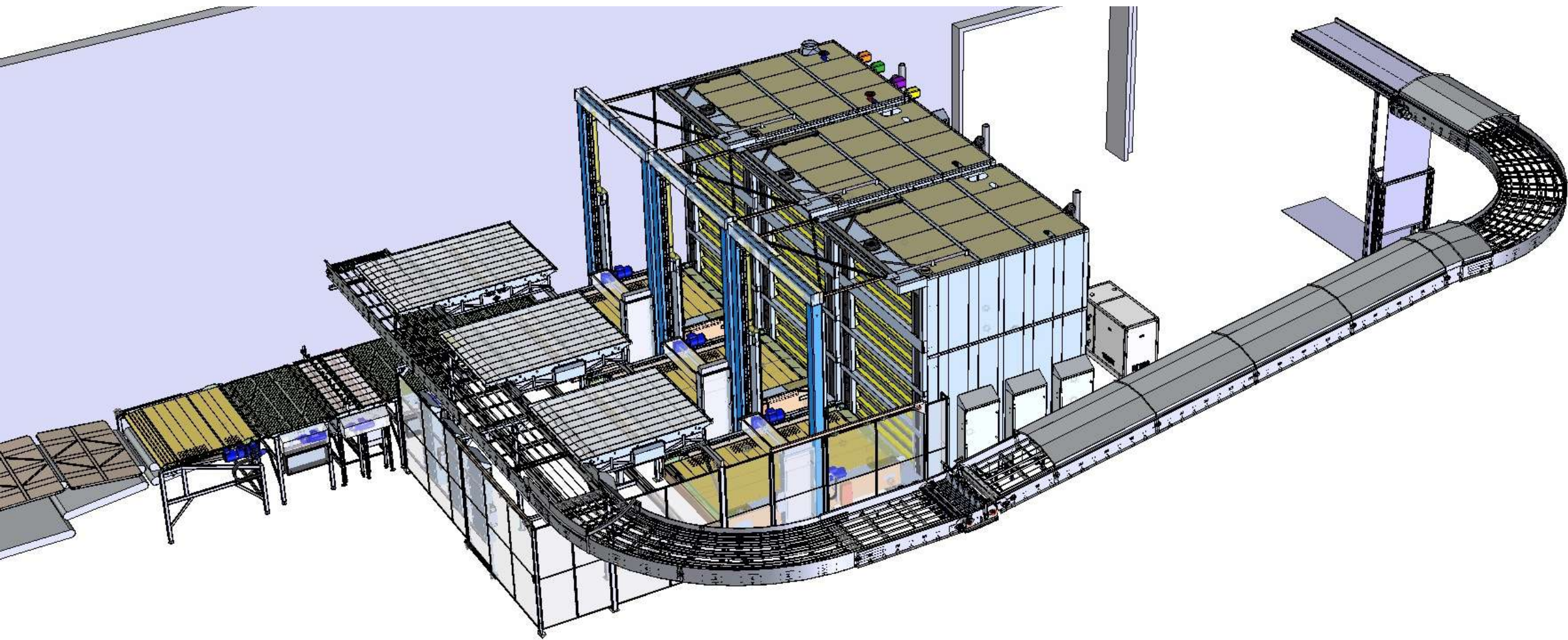
# **Examples of Deck oven Production Line Installations**

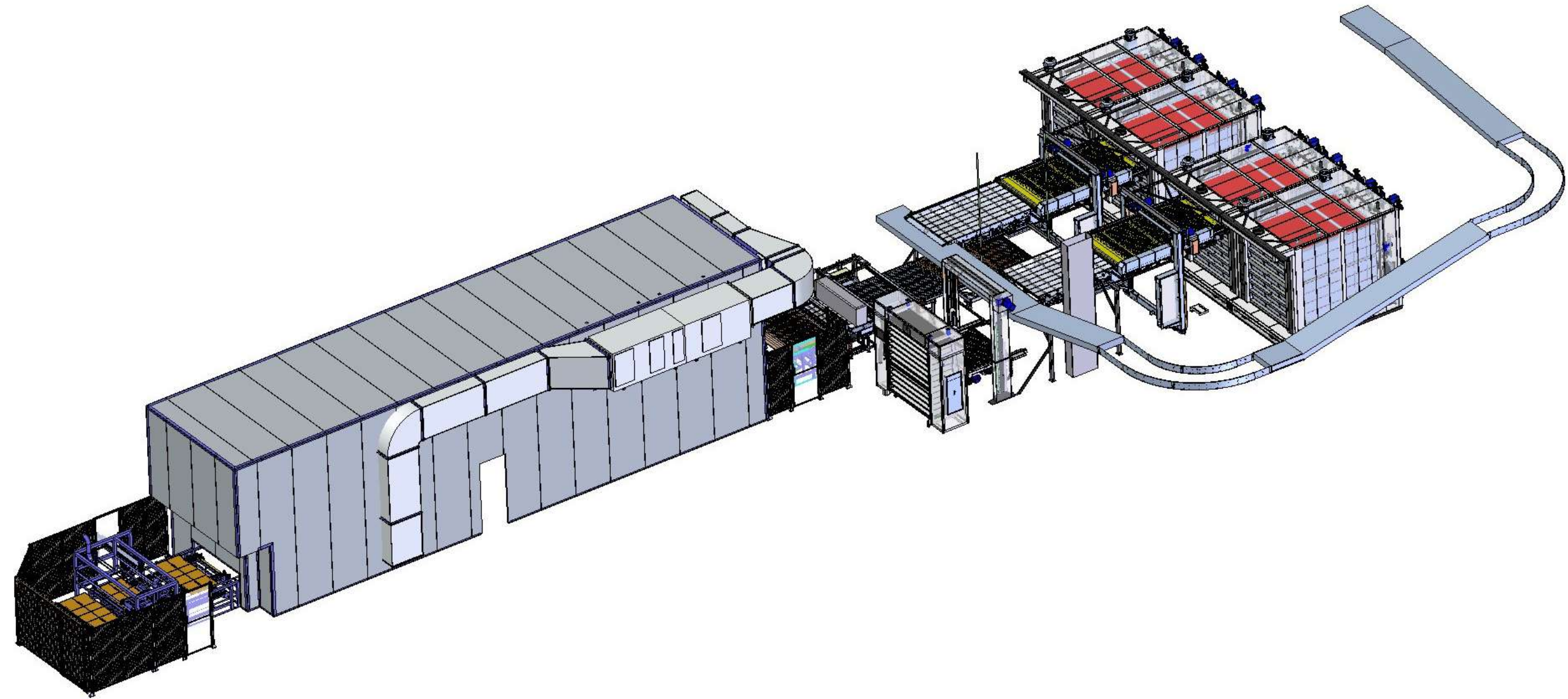




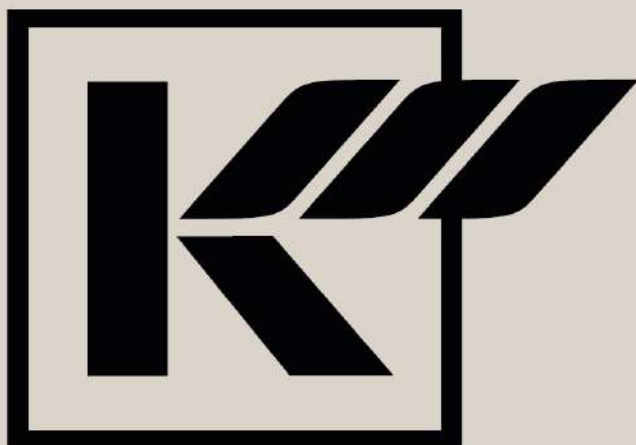












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